INTEGRATED IAM SERVICES

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JP1316372A2: DIOXANE-BASED LIQUID CRYSTAL SUBSTANCE

♥ Country: JP Japan

₽Title:

Α

**₽** Inventor:

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**SUZUKI GIICHI:** 

**HAGIWARA TAKASHI**; **NUMAZAWA KOICHI**;

PAssignee:

SHOWA SHELL SEKIYU KK

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Published / Filed:

Dec. 21, 1989 / March 8, 1989

**P**Application

Number:

JP1989000053791

C07D 319/06; C09K 19/34; G02F 1/13;

Priority Number:

March 9, 1988 JP1988000053805

**PAbstract:** 

NEW MATERIAL: A dioxane-based liquid crystal substance, expressed by formula I [R1 is 1-20C alkyl, alkoxy, alkyloxycarbonyl or alkylcarbonyloxy; (A) is formula II, III, IV, etc.; X is formula V, VI, etc.; R' is H or methyl; I is 1-6) (B) is formula II, III, etc.; Y is formula V, -O-, -S-, -CH2O-, etc.; R2 is formula VII, etc.; R3 is 1-20C alkyl, aralkyl, etc.; Z is CF3, C2F5, CHF2, etc.; m is 2-20].

EXAMPLE: 4'-(1-Trifluoromethylnonyloxycarbonyl)phenyl (R)-(+)-

4-(5-n-benzyl- trans-1,3-dioxan-2-yl)benzoate.

USE: Useful as a liquid crystal component in liquid crystal display, optical shutters, etc., and for application to electrooptical elements, etc.

PREPARATION: For example, ethyl malonate is reacted with a sodium alcoholate, etc., to provide a compound expressed by formula VIII, which is used as a raw material and passed through several steps to afford the compound expressed by formula I.

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Country: DE FR GB

PFamily:

Show 8 known family members

References:

PDF	Patent	Pub.Dat	Inventor	Assign e	Titl
23	US6239316	2001-05-29	Mine; Takakiyo	Chemical	Optically active secondar alcohol and process for t production thereof
			Mine;	Mitsubishi Gas	Anti-ferroelectric liquid cr



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23	US6133469	2000-10-17	Takakiyo	Chemical Company	compound
23	US6103517	2000-08-15	Mine; Takakiyo	Mitsubishi Gas Chemical Company	Process for the production optically active alcohol and novel optically active alcohol
22	US6002042	1999-12-14	Mine; Takakiyo	Mitsubishi Gas Chemical Company, Inc.	Liquid crystal compound
	<u>US5976409</u>	1999-11-02	Mineta; Hiroshi	Mitsubishi Gas Chemical Company, Inc.	Swallow-tail-shaped liqui compound
器	US5968413	1999-10-19	Mine; Takakiyo	Mitsubishi Gas Chemical Company, Inc.	Anti-ferroelectric liquid cr compounds
<b>3%</b>	US5942646	1999-08-24	Mine; Takakiyo	Mitsubishi Gas Chemical Company, Inc.	Optically active alcohol a process for the productio thereof
22	US5723069	1998-03-03	Mineta; Hiroshi	Mitsubishi Gas Chemical Company, Inc.	Anti-ferroelectric liquid cr compound and anti-ferro liquid crystal compositior
*	US5330678	1994-07-19	Okabe; Nobuhiro	Showa Shell Sekiyu Kabushiki Kaisha	Liquid crystal compound

CHEMABS 112(08)067359Y DERABS C89-265604

